

Sno-Thro®

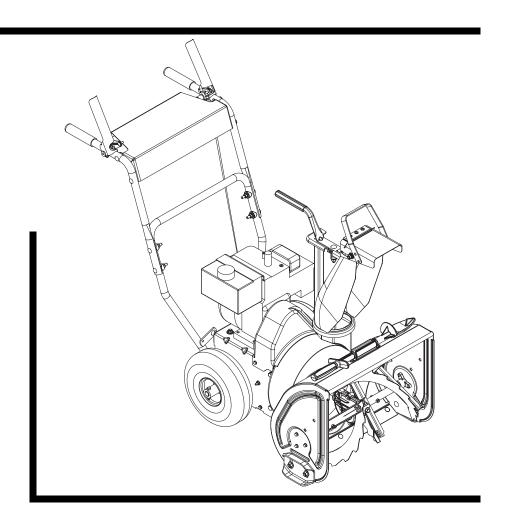
Parts Manual

Models

939001 - ST520E

939002 - ST520

939300 - ST520



THE MANUAL

Before you operate your unit, carefully and completely read manuals supplied with the unit. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

For your safety and the safety of others always read, understand, and follow all DANGER, WARNING, and CAUTION messages found in manuals and on safety decals.

Hardware descriptions are given in decimals.

Decimals to Fractions				
.063	1/16	.563	9/16	
.125	1/8	.625	5/8	
.188	3/16	.688	11/16	
.250	1/4	.750	3/4	
.313	5/16	.813	13/16	
.375	3/8	.875	7/8	
.438	7/16	.938	15/16	
.500	1/2	1.00	1	

SERVICE AND REPLACEMENT PARTS

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

Numbers are located on the product registration card in the unit literature package. They are printed on a serial number label, located on the frame of your unit.

- Record Unit Model and Serial numbers here:
- Record Engine Model and Serial numbers here:

UNAUTHORIZED REPLACEMENT PARTS

Use only Ariens replacement parts. The replacement of any part on this vehicle with anything other than an Ariens authorized replacement part may adversely affect the performance, durability, or safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

PRODUCT REGISTRATION

The Ariens dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If Dealer does not register your product, please fill out, sign and return the product registration card to Ariens or go to www.ariens.com.

YOUR SATISFACTION IS IMPORTANT

Questions? Please follow these helpful steps:

- 1. Refer to the manuals supplied with your unit.
 - They will guide you through safe and proper operation and maintenance.
 - They contain specifications on your unit.
 - If your questions are not answered in these manuals, go to step number two.
- 2. Contact Your Dealer.

Our dealers will be happy to supply any service or advice required to keep your unit operating at peak efficiency.

A factory trained staff is available to support your equipment needs. They stock genuine Ariens parts and lubricants manufactured with the same precision and skill as the original.

If your questions are not resolved by the support staff, ask for the manager or owner.

When contacting your Dealer supply your model and serial numbers.

TO SPEED PARTS ORDERING:

- 1. Know the model and serial numbers of your unit.
- 2. Know the part number required.
- 3. Know the quantity required.
- 4. Know the part description.

MODELS

Domestic

Model 939001 (520E)

5H.P. 20" Sno-Thro Serial No. 000101 and up

Model 939002 (520)

5H.P. 20" Sno-Thro Serial No. 000101 and up

International

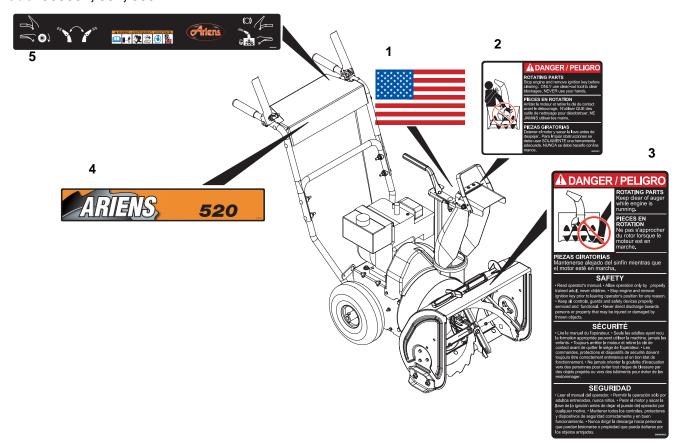
Model 939300 (520)

5H.P. 20" Sno-Thro Serial No. 000101 and up

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Model 939001, 002, 300



PS0322

Item	Part No.	Qty.	Description
1	05305100	1	Decal, American Flag
2	08093901	1	Decal, Danger- Rotating Parts
3	08094000	1	Decal, Danger
4	08000038	1	Decal, Front Panel, ST520
5	08000020	1	Decal, Control Panel - Single Speed

Notes

ENGINE AND BELT DRIVE

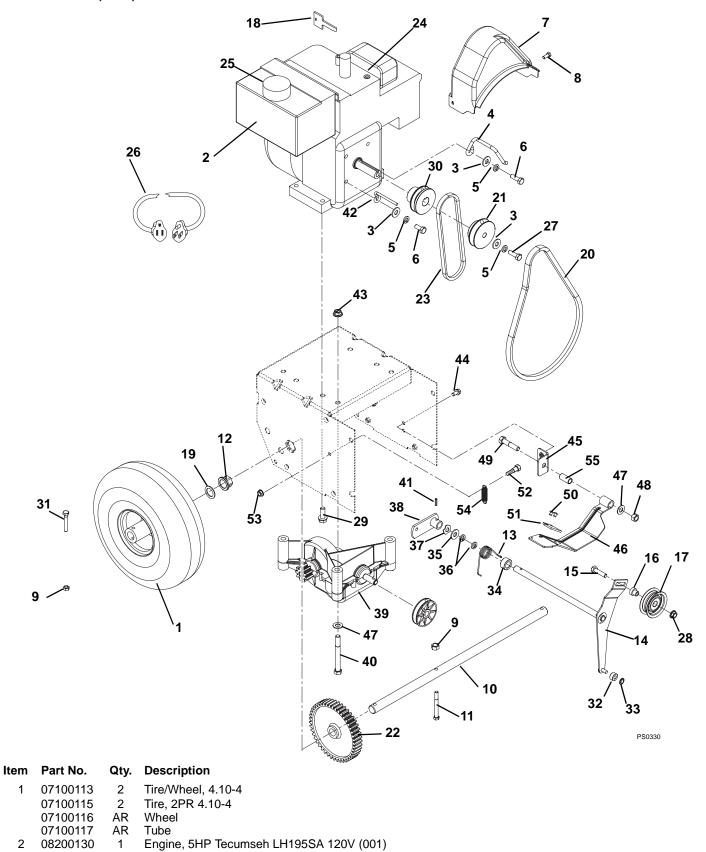
Model 939001, 002, 300

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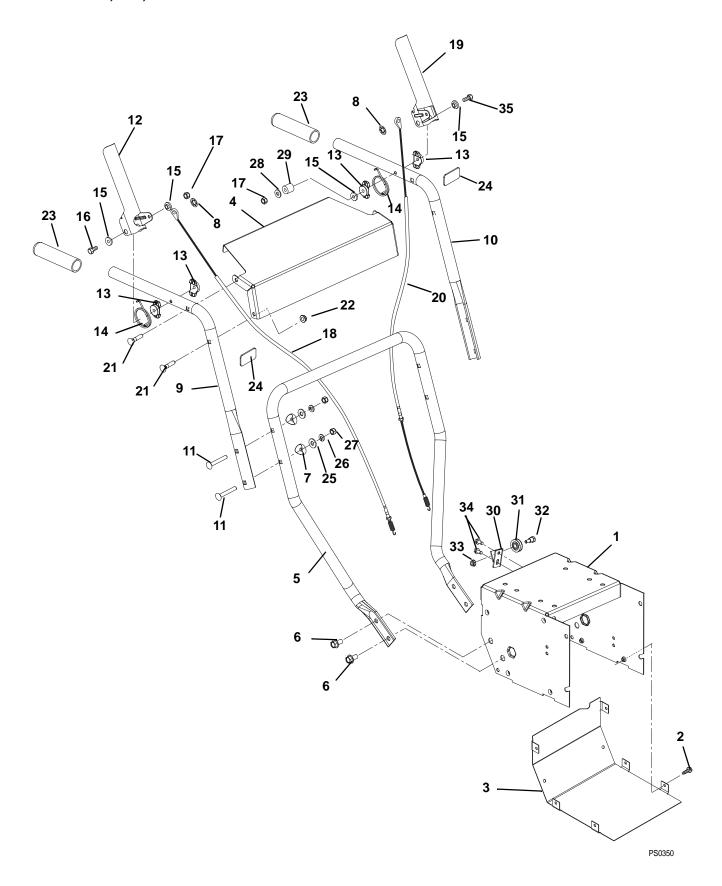
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Engine, 5HP Tecumseh OH195SA Recoil (300) Engine, 5HP Tecumseh LH195SA Recoil (002)

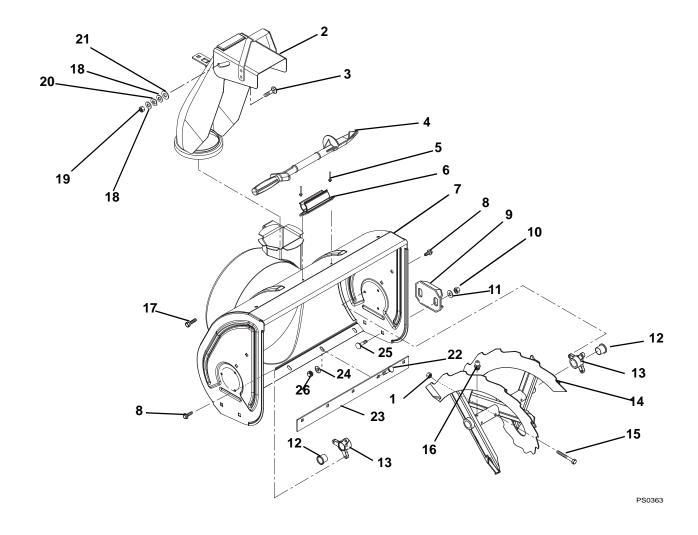
ENGINE AND BELT DRIVE

Item	Part No.	Qty.	Description
3	06435700	3	Washer, Flat Steel .38 x .88 x .083
4	00498300	1	Belt Finger
5	06307400	3	Washer, Locking .312 x .097
6	05947300	2	Bolt, Hex .31-24 x .75 Grade 5
7	00497200	1	Belt Cover
8	07412000	2	Screw, Tapping Hex Washer Head .25-20 x .50
9	06529700	3	Nut, Locking Center .25-20
10	00490700	1	Shaft, Axle
11	05952700	1	Bolt, Hex .25-20 x 2.25 Grade 8
12	05521600	2	Bushing, Flange Hex .75 x .87 x .53 x 1.18
13	08300015	1	Spring, Torsion .067 x .88
14	00490500	1	Weldment, Attachment Idler Arm
15	05947500	1	Bolt-Hex .31-18X1.25 Grade 5
16	01213100	1	Bearing Spacer
17	02457400	1	Idler
18	07532000	AR	Key, Push/Pull Tecumseh
19	06441400	2	Washer, Flat Steel .754 x 1.125 x .062
20	07200108	1	V Belt 4L-Section 34.63 EL
21	00279100	1	Sheave, Engine
22	00582100	1	Gear, 44 Tooth
23	07200109	1	V-Belt 3L-Section Stretch Fit
24	21533400	AR	Plug, Spark (001, 002)
	21533500	AR	Plug, Spark (300)
25	07531800	AR	Cap, Fuel
26	02483100	1	Cord, Extension 120 V (001)
27	05963600	1	Bolt, Hex .31-24 x 1.00 Grade 5
28	06543100	1	Nut, Locking Top Flange .31-18
29	07400010	4	Screw, Tapping .38-16 x 1.0 Hex Washer Head w/Vibra-Tite
30	00499500	1	Sheave, Drive
31	05953000	2	Bolt-Hex .25-20X1.75 Grade 8
32	05500037	1	Bushing, Sleeve .265 x .625 x .375
33	05717600	1	Ring, Retaining External .250 x .010
34	05500107	1	Bushing, Sleeve .513 x .748 x .475
35	06441100	1	Washer, Flat Steel .52 x .827 x .062
36	05500028	2	Bushing, Polyliner50 Snap-in 326-C
37	06400005	1	Washer, Wave .50 x .75 x .015 .13FRHT
38	00581500	1	Lever, Attachment Clutch
39	00499700	1	Transmission
40	05960900	3	Bolt, Hex .38-16 x 3.50 Grade 5
41	05800003	1	Pin, Groove .156 x .875 TYPE H LC
42	02411000	1	Belt Finger
43	06534800	3	Nut, Locking Flange .375-16
44	07412000	2	Screw, Tapping .25-20 x .50 Hex Washer Head Thread
45	00495251	1	Bracket, Mount Brake
46	00495300	1	Arm, Brake
47	06436200	4	Washer, Flat Steel .406 x .812 x .065
48	06529600	1	Nut, Locking Center .38-16
49	05958500	1	Bolt, Hex .38-16 x 1.75 Grade 5
50	06800001	2	Rivet, Pop .187 x .45 Dome Aluminum
51	00180500	1	Pad, Brake
52	05900030	1	Bolt, Shoulder .31 x .50 .25-20 x .438
53	06530100	1	Nut, Locking Flange .250-20
54	08300029	1	Spring, Tension .06 x .46 x 2.00
55	05500106	1	Bushing, Sleeve .385 x .500 x 1.045



HANDLEBARS AND CONTROLS

Item	Part No.	Qty.	Description
1	00490659	1	Frame
2	07412000	6	Screw, Tapping .25-20 x .50 Hex Washer Head Thread
3	00490859	1	Cover Bottom
4	53900100	1	Control Panel with Decal
5	00490951	1	Handlebar, Lower
6	07028500	4	Bolt Serrated Hex Flange Washer Head .38-16 x .75 Grade 5
7	07500005	4	Spacer, Handlebar
8	05717600	2	Ring, Retaining, External .25 x .010
9	00585951	1	Handlebar, Upper RH
10	00491051	1	Handlebar, Upper LH
11	06221600	4	Bolt, Round Head Square Neck .31-18 x 2.25
12	00398351	1	Paddle, Clutch - RH Compact
13	05500040	4	Bushing, .266 x 1.62 x .50
14	08300026	2	Spring, Torsion
15	00399300	4	Bushing, Flange
16	05961600	1	Bolt, Hex .25-20 x 2.50 Grade 5
17	06530900	2	Nut, Jam Nylon .250-20 With Nylon Locking Type Insert
18	06900034	1	Cable, Auger
19	00398151	1	Paddle, Clutch - LH Compact
20	06900035	1	Cable, Traction
21	06200009	4	Bolt, Round Head Square Extra Long Neck .31-18 x 1.50
22	06543100	4	Nut, Locking Top Flange .31-18
23	07518700	2	Handle Grip
24	00446700	2	Bumper Pad
25	06435700	4	Washer, Flat-Steel .38 x .875 x .083
26	06308600	4	Washer, Locking .31 x .078 Regular
27	06530200	4	Nut, Locking-Nylon .312-18
28	06437300	1	Washer, Flat Steel .281 x .62 x .065
29	00589800	1	Bushing, Sleeve .266 x .750 x .750
30	00373051	1	Bracket, Cable Pulley
31	07300012	1	Pulley, Cable
32	07000021	1	Bolt, Shoulder .375 x .375 x .25-20
33	06543500	1	Nut, Locking Top Flange .25-20
34	07412000	2	Screw, Tapping .25-20 x .50 Hex Washer Head Thread
35	05965300	1	Bolt, Hex .25-20 x 3.25

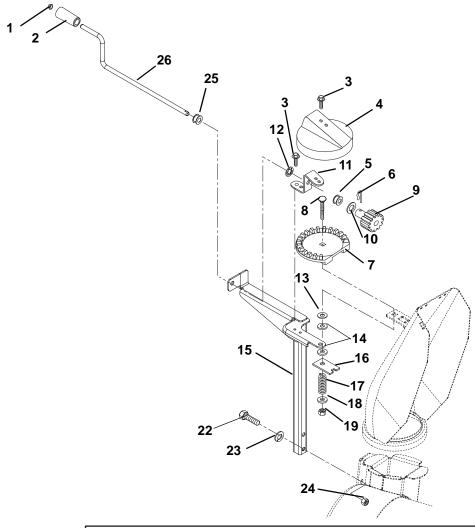


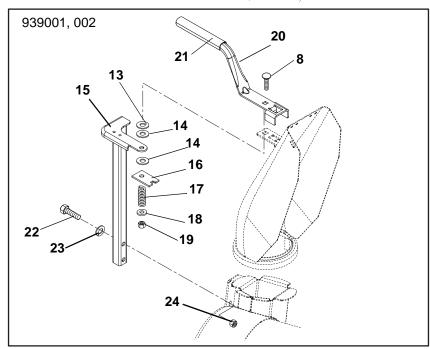
AUGER AND CHUTE

Item	Part No.	Qty.	Description
1	06529700	2	Nut, Locking Center .25-20
2	53214400	1	Chute, Discharge, Compact Snow
3	06220800	1	Bolt, Round Head Square Short Neck .31-18 x .75
4	00170200	1	Device, Snow Cleanout
5	06813600	2	Rivet-Pop .187 x .45 Stainless Steel Dome FBF64
6	00170300	1	Mount, Snow Cleanout
7	53214600	1	Blower Housing, 20"
8	07412000	6	Screw-Tapping .25-20 x .50
9	02483859	2	Runner, Double Flange
10	06529600	4	Nut, Locking Center .38-16
11	06435700	4	Washer, Flat Steel .38 x .88 x .08
12	05500012	2	Bushing-Flange, Nyliner .75" I.D.
13	00275200	2	Bushing, Rake Shaft .75"
14	53212300	1	Rake Right Hand 20" with Zerks (Includes Items 16)
	53212400	1	Rake Left Hand 20" with Zerks (Includes Items 16)
15	53200500	2	Shear Bolt with Nut (Includes Items 1)
16	07061300	2	Zerk, Fitting .25 x .125
17	07412900	4	Screw, Tapping .38-16 x .50 Hex Washer Head
18	06437200	2	Washer, Flat Steel .34 x .69 x .065
19	06529800	1	Nut, Locking Center .31-18
20	01320200	1	Wave Washer
21	06416800	1	Washer, Plastic .39 x .88 x .06
22	06222000	5	Bolt, Round Head Square Neck .31-18 x .50 Grade 5
23	00396659	1	Scraper Blade 20" Compact
24	06437200	5	Washer, Flat Steel .344 x .688 x .065
25	06200004	4	Bolt, Round Head Square Short Neck .38-16 x .75
26	06529800	5	Nut, Locking Center .31-18

DISCHARGE CHUTE CRANK

Model 939001, 002, 300



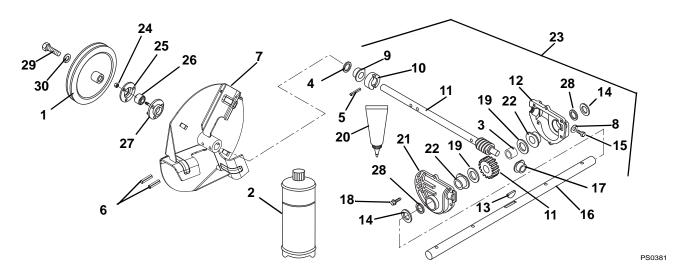


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DISCHARGE CHUTE CRANK

Item	Part No.	Qty.	Description
1	01019800	1	Cap, .38 Rod (300)
2	07500001	1	Knob, Chute Crank (300)
3	07412000	4	Screw, Hex Washer Head Self Tapping .25-20 x .50 (300)
4	03223000	1	Cover, Gear (300)
5	05500021	1	Bushing, Polyliner (300)
6	06714500	1	Pin, Spring Clip (300)
7	03222900	1	Gear, Chute (300)
8	06224400	1	Bolt, Round Head Square Neck .38-16 x 2.50 Grade 5
9	53214700	1	Bracket with Pinion Gear (Contains Items 5, 10, 11, 12) (300)
10	06400009	1	Washer, Thrust .625 x 1.0 x .03 (300)
11	00443551	1	Bracket, Pinion Gear (300)
12	03224300	1	Push Nut (300)
13	06439300	1	Washer, Flat Steel .38 x 1.50 x .062
14	01123800	2	Friction Washer
15	00588051	1	Weldment, Chute Pedestal w/Crank (300)
	00396751	1	Weldment, Pedestal Chute Mount (001, 002)
16	00398000	1	Friction Plate
17	08320900	1	Spring, Compression .19 x .56 x 1.62
18	06436200	1	Washer, Flat Steel .41 x .81 x .065
19	06529600	1	Nut, Locking Center .38-16
20	00427451	1	Handle, Chute Rotation (001, 002)
21	00345700	1	Grip, Chute Handle, Orange (001, 002)
22	05958500	2	Bolt, Hex .38-16 x 1.75
23	06308800	2	Washer, Lock .38 x .094
24	06542000	2	Nut, Locking Top Flange .38-16
25	05500020	1	Bushing, Polyliner 322-C (300)
26	03247700	1	Rod, Chute Crank (300)

GEAR CASE AND IMPELLER



Item	Part No.	Qty.	Description
1	00187000	1	Pulley, 4L with Hub .75 x 8.50
2	0008000	1	Ariens 16 oz. Bottle of L2 Lube
3	05531200	1	Bushing, Sleeve .76 x 1.500 x .44
4	05600004	1	Seal, Oil .748 x 1.378 x .276
5	05804900	1	Pin, Groove .19 x 1.25 Type E
6	05803700	2	Pin, Roll .25 x 1.75
7	00426651	1	Weldment, Impeller 12" 3 Blade
8	06442500	1	Washer, Fiber .44 x .66 x .032
9	05511200	1	Bushing, Flange .75 x 1.00 x .75 x 1.25
10	00272100	1	Thrust Collar .75 I.D.
11	53212500	1	Shaft & Worm Gear Assembly
12	00291100	1	Gear Case Casting, Machined Left Hand
13	06609300	1	Key, Woodruff .19 x .63 x .25 SAE 61 Hardened
14	06439000	2	Washer, Flat Steel .81 x 1.50 x .14
15	07417000	1	Screw, Tapping .38-16 x .75 Rolok
16	00260500	1	Shaft, Rake 20"
17	05520600	1	Bushing, Flange .50 x 1.00 x .75
18	07412400	6	Screw, Tapping Hex Washer Head .25-20 x 1.00
19	06441500	2	Washer, Flat Steel .755 x 1.375 x .062
20	00031700	1	Loctite Gasket 518
21	00291200	1	Gear Case Casting, Machined Right Hand
22	05531100	2	Bushing, Flange .75 x 1.13 x .50 x 1.50
23	53212600	1	Gear Case Assembly- 20" (contains 3-5,8-13,15-22,28)
24	06529700	3	Nut, Locking Center .25-20
25	01014200	1	Bearing Flange
26	05406300	1	Bearing, Ball .75 x 1.75 x .50
27	00428700	1	Bearing, Flange
28	05618900	2	Seal, Oil .75 x 1.375 x .250
29	05947300	1	Bolt, Hex .31-24 x .75 Grade 5
30	06307400	1	Washer, Locking .312 x .097 Heavy



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